

Claims

1. (Previously Presented) A system for cooling to a low temperature at least one piece of equipment, the system comprising a circulation loop (4) for heat-transfer fluid on which loop are mounted a low-temperature heat exchanger (60) and at least an equipment exchanger (102) comprising a heat-exchange surface, the heat-exchange surface of the equipment exchanger (102) being split between at least a first and a second heat-exchange section (104, 106), the first heat-exchange section (102) having a first flow rate (Q1) of heat-transfer fluid passing through it, the second heat-exchange section (106) having a second flow rate (Q2) of heat-transfer fluid passing through it, the first flow rate (Q1) being greater than the second flow rate (Q2).

2. (Previously Presented) The cooling system as claimed in claim 1 wherein the low-temperature heat exchanger (60) comprises at least a first and a second outlet nozzle (78, 132, 141, 143) for the heat-transfer fluid, the first nozzle being connected to the first heat-exchange section (104), the second nozzle being connected to the second heat-exchange section (106), the heat-transfer fluid leaving the low-temperature exchanger (60) via the first outlet nozzle being at a temperature higher than that of the heat-transfer fluid leaving the low-temperature heat exchanger via the second outlet nozzle.

3. (Previously Presented) The cooling system as claimed in claim 2 wherein the low-temperature heat exchanger (60) comprises a multitude of fluid circulation passes (86, 88, 90)

through which the heat-transfer fluid travels in succession, the first nozzle being located upstream of the second nozzle with respect to the circulation of the heat-transfer fluid through the passes (86, 88, 90).

4. (Previously Presented) The cooling system as claimed in claim 1 wherein the low-temperature circulation loop (4) comprises a circulation pump (58).

5. (Previously Presented) The cooling system as claimed in claim 1 wherein the low-temperature circulation loop (4) is mounted as a bypass between the inlet and outlet of the cooling circuit (2) of the motor vehicle combustion engine.

6. (Previously Presented) The cooling system as claimed in claim 1 wherein the equipment exchanger (102) is an intercooler.

7. (Previously Presented) The cooling system as claimed in claim 1 wherein the equipment exchanger (102) is a condenser forming part of the motor vehicle cabin air-conditioning circuit.

8. (Previously Presented) The cooling system as claimed in claim 7 wherein the condenser comprises a coolant-fluid condensation section (104) and a coolant-fluid supercooling

section (106) and a reservoir (154) for filtering and dehydrating the coolant fluid, the condensation section constituting the first heat-exchange section (104) of the equipment exchanger, the supercooling section constituting the second heat-exchange section (106) of the equipment exchanger.

9. (Previously Presented) The cooling system as claimed in claim 8 wherein the reservoir (154) is inserted between the first heat-exchange section (104) and the second heat-exchange section (106).

10. (Previously Presented) The cooling system as claimed in claim 8 wherein the reservoir (154) is situated after the second heat-exchange section (106).

11. (Previously Presented) The cooling system as claimed in claim 3 wherein the low-temperature circulation loop (4) comprises a circulation pump (58).

12. (Previously Presented) The cooling system as claimed in claim 3 wherein the low-temperature circulation loop (4) is mounted as a bypass between the inlet and outlet of the cooling circuit (2) of the motor vehicle combustion engine.

13. (Previously Presented) The cooling system as claimed in claim 3 wherein the

equipment exchanger (102) is an intercooler.

14 (Previously Presented) The cooling system as claimed in claim 3 wherein the equipment exchanger (102) is a condenser forming part of the motor vehicle cabin air-conditioning circuit.